

Distinguishing Between Supra-Arcade Downflows and Plasmoids

Supra-arcade downflows (SADs) observed above flaring active regions during long-duration events are theorized to be signatures of magnetic reconnection. Observations of SADs strongly indicate an association with shrinking reconnected flux tubes characterized by a specific magnetic topology. Plasmoids comprise another proposed group of observational reconnection signatures. While some plasmoids occur under nearly the same conditions as SADs, the magnetic configuration of the two phenomena are quite incongruous, yet they are often categorized together. We present distinguishing characteristics between SADs and plasmoids and indicate how their respective observations may yield insight into the conditions within the current sheet above eruptive active regions.